

Aero Medical Association were told at their meeting in Memphis.

Use of the new test detects 20 per cent more cases of heart disease than would be found by the usual physical examination, according to experience with it in more than 500 patients and routine examinations of 200 civilian pilots.

The recent deaths of two young pilots, who suffered heart attacks in mid-flight and were barely able to land their planes before dying, emphasize the need of more thorough examination of the pilot's heart. The ages of these two victims of unsuspected heart disease, 27 years and 34 years respectively, show that serious heart damage is not confined to middle and old age.

"We, as examiners of pilots, should place more emphasis on the thoroughness of our cardiovascular (heart and artery) examinations. We are often chided about our rigid eye examinations that require pilots to be able 'to see around corners'. It is much more important that the pilot should live to see the next landing field. We must recognize that we are training men who must be able to stand the heavy pressure of flight duty. We cannot expect such endurance in the presence of cardiovascular disease."

The new three-way test of heart fitness involves the use of the familiar electrocardiograms and of two new techniques, stethography and cardioscopy.

Electrocardiograms are records in the form of wavy lines on paper of the electric currents accompanying heart activity. With cardioscopy, the physician does not have to wait for a record on paper of heart activity but can look at the message from the heart as it is being sent. If he sees signs of heart damage, he can have a permanent record made of it.

With stethography, the heart "speaks for itself", giving a sound track record of its condition. Sound waves made by the heart as it beats are thus recorded so the physician can tell whether the heart tones are normal or whether there are murmurs indicating heart damage.

Synchronized electric and sound wave messages give much more information about the heart's condition than either one alone. The sound record was essential for diagnosis of one-fifth of the cases reported, detecting early heart disease that would not have been discovered in otherwise thorough heart examinations.—Drs. W. M. Bartlett and J. B. Carter, in *Science News Letter*, November 2, 1940.

Delay Sewing Up War Wounds

War wounds in which the skin and tissues are badly torn should not be immediately sewn up. French army surgeons after experience in the present war all warn of the dangers of primary suture—that is, sewing up the wound

the first time the surgeon sees it—in war wounds. The ideal conditions of a healthy patient, a clean skin, a wound made by a relatively sharp and clean instrument, repair of the wound within six hours after it was inflicted, and opportunity for the surgeon to use meticulous care in treating the wound and to watch it during the time it is healing, are hardly likely to be found in war surgery. But unless these conditions are present do not practise primary suture of wounds.—Dr. F. W. Bancroft, in *Science News Letter*, November 2, 1940.

Colonel Lavell H. Leeson has left Vancouver to assume his position as A.D.M.S. of the 3rd Canadian Division.

Other medical men from British Columbia who are serving overseas are: W. J. Elliot, with the Navy; W. M. Carr and Andrew Turnbull, of Victoria; H. A. DesBrisay, A. C. Gardner Frost, J. A. MacMillan and H. A. Robertson, of Vancouver; and H. P. Swan, formerly of Duncan, all reported to be in England. Dr. H. B. Galbraith is in Montreal on military duties.

Lt.-Col. R. A. Hughes is D.M.O., M.D. No. 11. He took over the office from Lt.-Col. Gordon C. Kenning, who was Acting D.M.O., and is now removed to Regina as D.M.O. of that Military District.

War Literature

THE BRITISH MEDICAL JOURNAL

- Hygiene of the Air Raid Shelter (leading article), 1940, 2: 457.
- Changes in the Blood Stored in Different Preservatives, Jal Dubash, O. Clegg and Janet Vaughan, 1940, 2: 482.
- Methods of Fluid Administration in the Treatment of Surgical Shock, R. A. King, 1940, 2: 485.
- Air Raids; Dealing with Casualties at an Incident, N. M. Vallyely, 1940, 2: 498.
- Hours of Work in Wartime (leading article), 1940, 2: 527.
- Medicine in Industry, Ronald E. Lane, 1940, 2: 531.
- The Transfusion Problem (leading article), 1940, 2: 597.
- The Control of Lice, P. A. Buxton, 1940, 2: 603.
- Immunization against Influenza Virus A (annotation), 1940, 2: 632.
- Cerebrospinal Fever (annotation), 1940, 2: 634.
- Injuries to Ear (meeting of Society), 1940, 2: 639.
- Chemotherapy for War Wounds (meeting of Society), 1940, 2: 640.

CANADIAN MEDICAL ASSOCIATION JOURNAL

- The Trends in Military Surgery in the First Year of the War, Lt.-Col. J. A. MacFarlane, 1940, 43: 540.

JOURNAL OF AVIATION MEDICINE

- Intraocular Pressure at High Altitudes, E. A. Pinson, 1940, 11: 108.
- The Primary Flight Phase: a Psychobiological Consideration of Early Instruction in Flying, H. B. Porter, 1940, 11: 112.

THE LANCET

- Penetrating Wounds of the Chest: More Experiences in the Last War, Sir Charles Gordon-Watson, 1940, 2: 194.
- Management of Cerebrospinal Fever Treated with Sulfapyridine, Denis Williams and Denis Brinton, 1940, 2: 482.
- Blood Substitutes in the Treatment of Acute Hæmorrhage, G. A. H. Buttle, A. Kekwick and A. Schweitzer, 1940, 2: 507.
- Detection of Tuberculosis Among Recruits, G. G. Kayne, 1940, 2: 518.
- Superiority of Whole Meal (leading article), 1940, 2: 523.
- Diluents for Stored Blood, M. Maizels and N. Whitaker, 1940, 1: 590.

THE UNITED STATES NAVAL MEDICAL BULLETIN

- Recent Advances in Blood Transfusion, E. K. Kunkel, 1940, 37: 578.
- Importance of Oxygen to the Navy Aviation and in Therapeutics, W. L. Boothby, W. R. Lovelace and H. H. Carroll, 1940, 37: 640.

BOOKS AND PAMPHLETS

- Air Raid First Aid, Robert J. Blackham, John Bale & Sons, London, 1940.
- Wound Infection, W. H. Ogilvie and others, Lancet War Primer, The Lancet Ltd., 7 Adam St., Adelphi, London, W.C.2, 1940, 2/6 net.
- Field Surgery in Total War, Major Douglas W. Jolly, Hamish Hamilton, London, price 10/6.

In the face of the greatest danger since the days of Napoleon, the British, resolute, seem to say again with Shakespeare—

*Once more unto the breach, dear friends, once more,
Or close the wall up with our English dead!
In peace there's nothing so becomes a man
As modest stillness and humility;
But when the blast of war blows in our ears,
Then imitate the action of the tiger:
Stiffen the sinews, summon up the blood.*

—King Henry V, Act 2, Sc. 4, l. 74.

Medical Societies**The Calgary Medical Society**

The monthly meeting of the Calgary Medical Society was held in November, 1940, at the Provincial Sanatorium on invitation by Dr. A. H. Baker, the Superintendent of this institution.

This meeting took the form of a round-table discussion. Members of our Society had been asked to send in questions regarding any phase of the subject of tuberculosis which members of the staff of the Sanatorium would answer, with the exception of tuberculosis of the tarsal conjunctiva and phlyctenular conjunctivitis, which were discussed by Dr. A. E. Fettes, of Calgary.

The value of the tuberculin test was comprehensively outlined by Dr. Darns. Dr. A. H. Baker stated that tuberculosis producing symptoms will give tuberculin reactions in 100 per

cent of patients. Tuberculosis of bones seems to develop a greater degree of sensitiveness to tuberculin than in pulmonary tuberculosis.

Dr. L. M. Mullen presented an interesting case history; interesting because of the sudden termination. This patient had a pleural effusion which was considered to be either of neoplastic or tuberculous origin. As much as 800 c.c. of fluid had been aspirated from his right pleural cavity. Following a routine aspiration, two days before his death, he had severe dyspnoea which gradually lessened. The following day he had another attack of dyspnoea and also loss of consciousness. The same evening he had attacks of vomiting followed by dyspnoea. The following morning his temperature was 97° F. and his pulse 160 per minute. He became extremely weak. It was noted that his liver was enlarged and tender. X-ray examination had shown the right lung markedly collapsed. Post-mortem examination revealed a generalized carcinomatosis.

G. E. LEARMONTH

The Canadian Physiological Society

The sixth annual meeting of the Canadian Physiological Society was held at the University of Toronto on November 1 and 2, 1940. The total registration was 132 and guests.

The Council for 1940-41 was elected as follows: *President*—Prof. G. S. Melvin, Queen's University; *Secretary*—Prof. R. G. Sinclair, Queen's University; *Treasurer*—Prof. E. M. Watson, University of Western Ontario; *Councillors*—Professors J. K. W. Ferguson, University of Toronto; G. Gosselin, Université de Montréal; C. A. Morrell, Department of Pensions and National Health, Ottawa; A. C. Rankin, University of Alberta (Department of National Defence); H. Selye, McGill University; C. B. Weld, Dalhousie University, Halifax.

Fifteen new members were elected, making a total membership of two hundred and forty-five.

During the one morning and two afternoon sessions, forty-two papers were read.

ABSTRACTS OF PAPERS HAVING A SPECIAL
MEDICAL INTEREST

STUDIES IN THE ETIOLOGY OF TRAUMATIC SHOCK.

—D. Y. Solandt, J. W. Magladery (by invitation) and C. H. Best, Department of Physiological Hygiene, University of Toronto.

The investigation of traumatic shock in a large series of dogs has re-emphasized the etiological importance of the blood and fluid lost at the site of injury. In many animals shocked by light pounding of the thigh muscles the increase in volume of the injured parts represents a fluid loss which alone might cause death. In a number of instances, however, this fluid loss is not sufficient to account for the death of the experimental animal. Some other factor or group of factors must come into play to tip the scales against the animal's natural powers of recuperation. Moon has been the most recent advocate of a toxic factor. Freeman has suggested a neurological factor and the McGill group